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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 701586-53653
INTERNATIONAL APPLICATION NO. PCT/US2004/001329	INTERNATIONAL FILING DATE 16 January 2004 (16.01.2004)	U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/512013 To be assigned
TITLE OF INVENTION HAPLOTYPe ANALYSIS		
APPLICANT(S) FOR DO/EO/US THE TRUSTEES OF BOSTON UNIVERSITY; CANTOR, Charles R. and DING, Chunming		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.</p> <p>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). </p> <p>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). </p> <p>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ul style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. </p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p>		
Items 11 to 20 below concern document(s) or information included:		
<p>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input checked="" type="checkbox"/> A preliminary amendment.</p> <p>14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13(er.2 and 37 CFR 1.821- 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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<table border="1"> <thead> <tr> <th colspan="2">The following fees have been submitted</th> <th>CALCULATIONS</th> <th>PTO USE ONLY</th> </tr> </thead> <tbody> <tr> <td colspan="2">21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)).....</td> <td>\$ 300</td> <td></td> </tr> <tr> <td colspan="2">22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))</td> <td></td> <td></td> </tr> <tr> <td colspan="2">If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....</td> <td>\$ 0</td> <td></td> </tr> <tr> <td colspan="2">All other situations.....</td> <td>\$ 200</td> <td></td> </tr> <tr> <td colspan="2">23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....</td> <td>\$ 0</td> <td></td> </tr> <tr> <td colspan="2">Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....</td> <td>\$ 100</td> <td></td> </tr> <tr> <td colspan="2">International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.....</td> <td>\$ 400</td> <td></td> </tr> <tr> <td colspan="2">All other situations.....</td> <td>\$ 500</td> <td></td> </tr> <tr> <td colspan="2">TOTAL OF 21, 22 and 23 =</td> <td>600.00</td> <td></td> </tr> <tr> <td colspan="2"><input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.</td> <td></td> <td></td> </tr> <tr> <td>Total Sheets</td> <td>Extra Sheets</td> <td>Number of each additional 50 or fraction thereof (round up to a whole number)</td> <td>RATE</td> </tr> <tr> <td>32 - 100 =</td> <td>-68 /50 =</td> <td></td> <td>x \$250</td> </tr> <tr> <td colspan="2">Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</td> <td>\$ 130.00</td> <td></td> </tr> <tr> <td>CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td>RATE</td> </tr> <tr> <td>Total claims</td> <td>18 - 20 =</td> <td>0</td> <td>x \$ 50</td> </tr> <tr> <td>Independent claims</td> <td>4 - 3 =</td> <td>1</td> <td>x \$200</td> </tr> <tr> <td colspan="2">MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td> <td>+ \$360</td> <td>\$ 0.00</td> </tr> <tr> <td colspan="2">TOTAL OF ABOVE CALCULATIONS =</td> <td>\$ 930.00</td> <td></td> </tr> <tr> <td colspan="2"><input checked="" type="checkbox"/> Applicant claims small entity status. 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10/542043

Practitioner's Docket No. 701586-53653

JC20 Rec'd PCT/PTO 13 JUL 2005
IN THE UNITED STATES RECEIVING OFFICE

PATENT

PCT/US2004/001329	16.01.2004 16 January 2004	17.01.2003 17 January 2003
International Application Number	International Filing Date	International Earliest Priority Date

TITLE OF INVENTION: HAPLOTYPE ANALYSIS

APPLICANT(S) FOR EO/DO: The Trustees of Boston University

INVENTOR(S)/APPLICANT(S) FOR US: Charles R. Cantor and Chunming Ding

**VERIFIED CERTIFICATION OF EXPRESS MAILING DATE
(INTERNATIONAL APPLICATION (37 C.F.R. section 1.10(c))**

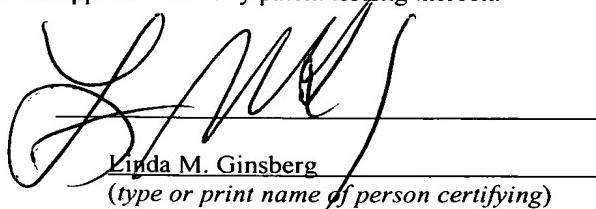
I declare that, on July 13, 2005 I deposited, with the United States Postal Service, in an envelope "Express Mail, Post Office to Addressee," bearing Label Number EV 653001185 US, addressed to the "MAIL STOP PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450," and having an express mail certification that I executed, the following papers:

1. Express Mail Certificate EV 653001185 US (1 pg.);
2. Transmittal Letter to the U.S. Receiving Office Concerning a Filing Under 35 U.S.C. 371 – page 2 in duplicate (4 pp.);
3. Application Data Sheet (3 pp.);
4. Preliminary Amendment (7 pp.);
5. Form PCT/IB/308 (1 pg.);
6. Published PCT WO 2004/065617 A2 (coversheet, 1 pg.);
7. PCT/IB/Form 304 (1 pg.);
8. PCT/IB/Form 301 (2 pp.);
9. Check - \$465.00; and
10. Return Receipt Postcard.

A copy of these papers from the file of this application is attached.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application of any patent issuing thereon.

Date: July 13, 2005



Linda M. Ginsberg
(type or print name of person certifying)

10/542043

JC20 Rec'd PCT/PTO 13 JUL 2005

PTO-4990 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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- a. A check in the amount of \$ 465.00 to cover the above fees is enclosed.
- b. Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-0850. A duplicate copy of this sheet is enclosed.
- d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Ronald I. Eisenstein
Nixon Peabody LLP
100 Summer Street
Boston, MA 02110
US



SIGNATURE

Ronald I. Eisenstein/Leena H. Karttunen
NAME

30,628/L0207

REGISTRATION NUMBER